

Accelerating Engineer to Order Production: A Single Portal Improves Document Management

by Sajesh Murali

Manual and duplicate documentation processes slow down engineer to order production. Integration and collaboration between suppliers, manufactures and customers all in one portal will get your company its profit, faster.

The Challenge

Companies that engineer products to-order (ETO) face unique challenges when attempting to reduce time-to-market.

Delivering profitable ETO products on demand is difficult. To be successful, companies must be able to quickly and accurately respond to customer specifications across their enterprise, spanning engineering, manufacturing, purchasing and quality departments.

Many of the product maker's challenges are solved by implementing a product lifecycle management (PLM) solution, or at least a document management solution, but the real problem is still not solved. For many companies, the delivery of documentation is a contractual obligation; customers don't pay until the documentation is delivered.

Traditionally, product documentation is dealt with at the end of the production cycle. As a result, the product is often delivered while the documentation is still pending. Tracking and updating documentation improves customer satisfaction, reduces the order-to-cash cycle, and improves on-time delivery. Put bluntly, manufacturers get paid quicker.

Product documentation includes document types, approvals, history tracking, teams involved, ownership, sign-offs, editing history and so on. Document management point solutions fail to solve two major problematic areas: data integration and supplier customer collaboration, delaying time to market and increasing overall cost.

The Couch Conundrum

Assume you are buying a set of couches and approach a vendor with your request. In addition to your custom couches, in your contract you request documentation of the materials used in the couch. You want the material and origin information of the wood and leather used, along with the warranty and service information. You outline that this information is to be approved by you before the custom couches are finalized, and included as a package.

So, will you pay the vendor if the couch is delivered without the documentation you requested? In this example, the answer is no. Will you be satisfied if your couches are delivered, but not with the documents? Again the answer is no. For you to get your contracted order, complicated coordination is required between the vendor and the multiple international suppliers. If this simple situation could arise in a basic scenario like an order for custom couches, imagine the issues manufacturers face with an order of magnitude of a nuclear pump.

Integration Enables Documentation

As we move towards an increasingly digital and connected world, the actual product and service data is developed multiple systems like enterprise resource planning (ERP) and PLM. The product data changes and advances throughout the ETO process, and requires attentive updating. Getting the information into product documentation should not be a manual or duplicative effort, but it often is. The right information already exists in disparate systems and there should be a bridge that automatically transfers the right information into the right documents. Moreover, there should be a seamless data exchange represented in one **single interface platform** for everyone to access the same data.

Collaboration Enables Documentation

In this world of globalization, where the products are manufactured at multiple locations by multiple suppliers for single or multiple customers, there is a need for a common ground where suppliers and customers can interact together and across platforms. A common platform should provide information as to **when, what and how** a demand is made and capture the response of the request in the form of documentation, approvals or updates.

Communication between multiple suppliers and customers is what gives ETO companies an edge to reduce the cycle time on managing documentation. Real value is achieved when all of the collaboration takes place in a **single interface platform** to reduce the challenge of adaptability.

Engineering custom orders can lengthen the order to cash cycle. Integration and collaboration between suppliers, manufactures and customers reduces time to market, increasing both customer satisfaction and company profit.

Originally published on June 1st, 2016

[What's your view? Add your question or comment](#)

About the Author



Sajesh Murali

sajesh.murali@kalypso.com

Sajesh lives in Austin with his loving wife and is a die-hard gamer drawn to anything high tech. Superbikes are his passion and in his free time he loves to cook and catch up with his books.